UARTERS AIR COMBAT COMMAND ENVIRONMENTAL QUALITY HANDBOOK – PROGRAM GUIDANCE FOR THE 21st CENTURY

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INTRODUCTION: Headquarters (HQ) Air Combat Command (ACC), Environmental Compliance Branch first published the Environmental Compliance Handbook in February 1996. The handbook consolidated HQ ACC policy/guidance to achieve and sustain environmental compliance. A subsequent July 1996 update expanded the handbook by addressing current compliance concerns like Underground Storage Tank (UST) management, Polychlorinated-Byphenols (PCB) disposal, Aerospace National Emission Standards for Hazardous Air Pollutants (NESHAP), environmental incident investigation, environmental partnering, open burn/open detonation permit closure, and Resource Conservation and Recovery Act (RCRA) Corrective Actions (RCA). The third edition of the handbook published on 5 September 1997 and available on CD-ROM reflects the Air Force initiative to incorporate Pollution Prevention (P2) as a method to achieve compliance. A chapter is devoted to pollution prevention along with updates on a number of important environmental compliance issues relative to ACC base level environmental management. This paper presents an overview of significant policies and guidance found in the 5 September 1997 issue of the Environmental Quality Handbook.

The Environmental Quality Handbook is a consolidated tool for installation managers to understand policies and guidance regarding environmental compliance through P2. Although only covered in this paper in an abbreviated form, program managers can see where emphasis should be placed to meet regulatory compliance. Maintaining full compliance with all regulatory programs does not happen by chance. Through the dedicated efforts of many environmental professionals using tools like the ACC Environmental Quality Handbook, installations can continue to deliver world-class environmental programs.

THE CHALLENGE: Zero enforcement actions has become a byword of the Air Force environmental manager. While regulatory agencies utilize the Notice of Violation (NOV) as an administrative process, the Air Force has made these administrative non-compliance procedures a measure of merit. The NOV is used to gauge the environmental performance of entire installations and Commands. In fact, the entire Air Force seems focused on this singularly,

sometimes minor, event as a test of environmental success. While environmental professionals understand there is much more to successful management than achieving zero enforcement action, today's challenge is to sustain an environmentally compliant mission within the current funding climate.

The following summary of environmental compliance and P2 policy and guidance concentrates on balancing these two opposing philosophies, achieving zero enforcement actions and keeping costs low. Locating a happy medium is a challenge and one that must be achieved if the mission is to be effectively executed. Zero enforcement is best achieved by diligent and constant effort by dedicated, knowledgeable environmental professionals.

RESOURCE CONSERVATION AND RECOVERY ACT: The Resource Conservation and Recovery Act (RCRA) was passed in 1976 and established the statutory requirements that are the basis of the Hazardous Waste (HW) regulations. In 1984 Congress passed the Hazardous and Solid Waste Amendments (HSWA) which required the Environmental Protection Agency (EPA) to establish regulations applicable to Underground Storage Tanks (USTs) and the corrective actions program. Both of these regulations have had significant and costly impacts on the Air Force. Some of the RCRA updates to the handbook reviewed below include the UST and RCA site clean-up programs. Other areas addressed are HW training, the RCRA air emissions standard rule, fuel tank water bottoms disposal, Part B Permit elimination, and HW management while deployed.

USTs are defined at 40 CFR §280.12 as "any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground." By 22 December 1998 USTs greater than 660 gallons which are leak free must have leak monitoring, spill/overfill prevention, and cathodic protection. Leaking USTs will be removed. Replacement tanks must be aboveground, or underground tanks will be in vaults, or double walled in accordance with state and local regulations. It is ACC's policy to apply this same strategy to unregulated USTs (e.g. heating oil tanks), although this requirement is a low funding priority. Every ACC base should have a completed UST inventory, have completed upgrades or have projects programmed to complete upgrades by the deadline.

Resource Conservation and Recovery Act (RCRA) Corrective Actions (RCA): For those bases with Part B permits, RCA should be an important part of your RCRA management program. Authority for implementation of this program is the 1984 amendments to RCRA called the Hazardous Solid Waste Amendments (HSWA). It mandates each regulatory agency include as part of RCRA permits a Corrective Action Management plan (CAMP). The CAMP must also include a schedule for sites where releases of contaminants are suspect or documented. This will sound familiar to the environmental restoration staff at ACC bases. It is similar in that it regulates clean-up of contaminated soils similar to Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or Superfund. The big difference comes in control of the clean-up process. Under CERCLA owners propose solutions and advise regulatory agencies of their plan of action. In RCA the owners propose solutions and the regulatory agency

approves their plan of action. Additionally, under RCRA the installation is susceptible to fines and penalties. Obviously management of Air Force sites under CERCLA is the preferred approach.

Implementation of RCA has begun at ACC bases. The handbook provides reference to an important implementation tool that will yield considerable savings to the Air Force. That tool is the use of the American Society for Testing and Materials, standard E 1739-95. This standard is titled, Risk-based Corrective Actions (RBCA) (pronounced Rebecca). Each RCA program manager should be familiar with this standard and apply it at appropriate sites to mitigate financial impacts to installations while maintaining full compliance. ACC estimates a \$57 million cost avoidance is possible over a six-year period using risk-based clean-up standards.

Hazardous waste training is broken down into Levels I, II and III. Level I is required for all personnel, and their supervisors, who, although they do not handle hazardous waste on a regular basis, are reasonably anticipated to encounter it during the course of their duties. This category includes commanders and public affairs personnel. The training consists of an overview of HW issues including roles and responsibilities, emergency response/spill response, safety and P2. Level II or operational training is required for all personnel, and their supervisors, who work with hazardous waste on a regular basis. A standard Level II training session should last one to three hours. Level III training or regulated training is required for all personnel, and their supervisors, who work in 90-day accumulation points, or at interim status or permitted Treatment, Storage and Disposal (TSD) facilities. The desired learning objectives are listed in the handbook, pages 3-12. These objectives should help managers and operators understand the importance of characterizing waste prior to disposal, proper disposal procedures, satellite accumulation point management and hazardous waste storage to mention a few. These are just a sampling of the areas where enforcement actions have been active within ACC. Refresher training for all three levels is required annually. Installation managers will also find the "Hazardous Waste Compliance Assessment" dated June 1995 and prepared for ACC by Oak Ridge National Laboratory, a valuable and easy to read resource of HW terminology and key performance areas. The most valuable part of this training tool is the activity-specific guidance on assessing compliance. Achieving HW management compliance requires an effective HW training program. The newly released Air Force CD ROM version of desktop HW training can be utilized to fulfill the training requirements outlined above.

The RCRA air emissions standard became effective in December 1996 and a final rule clarification published 8 December 1997. The rule establishes standards for the control of volatile organic compound emissions from tanks, surface impoundments, and containers at TSDs and 90-day accumulation points. In ACC we do not have any volatile organic waste in surface impoundments or tanks, so the recycling and treatment might be the only area of concern. Containers are excluded if they have a design capacity less than about 26 gallons, are used to store HW at satellite accumulation points, or are used by small quantity generators to store onsite for less than 180 days. Potential areas of concern within ACC could be aerosol can crushers or solvent stills. By using Department of Transportation (DoT) approved containers which provide a "cover" that forms a continuous barrier over the waste and meets the requirements of a closed container under RCRA, the specific requirements of this rule can be met.

Fuel tank bottom water resulting from condensate in petroleum storage tanks typically tests positive for the presence of benzene. Hence it must be disposed of as HW. However, you may be able to manage it as a domestic sewage, pass it through a sewer system to a Publicly Owned Treatments Works and, therefore, not be a solid waste as defined by RCRA. Another option is to pretreat the water, removing the benzene and then discharge to the sanitary sewers. This latter provision must be accomplished under provision of the Clean Water Act (CWA) and the installation National Pollution Discharge Elimination System (NPDES) permit. Ellsworth AFB has installed a pretreatment system on their bulk storage tanks that is successfully meeting their regulatory discharge and disposal requirements and saving HW process costs.

Eliminating Part B RCRA permits is an objective of ACC. Environmental permit elimination is also being considered for an Air Force measure of merit. One way to reduce environmental oversight and liability is to reduce the HW handled. Most ACC installations have streamlined their hazardous waste management to the point it may be possible to eliminate the greater than 90 day storage facility. This permitted facility is usually located at the Defense Reutilization and Marketing Office (DRMO) and authorized via a RCRA Part B permit. The regulatory requirements for a Part B permit are specific and often onerous. Eliminating this permit will enable base managers to focus on improving other important hazardous waste management functions. As a matter of interest, Defense Reutilization and Marketing Service (DRMS) recently announced the projected closure of DRMOs at four ACC bases. This may fuel the motivation to act quicker to complete RCRA permit closures at the affected bases. Another way to reduce the need for a permit is to reduce HW. One way to do this is to use the Hazmart facility, a program for tracking the distribution and use of hazardous materials on a base. The system tracks materials from the Hazmart warehouse to the shop, and then back to the warehouse for reissue or proper disposal.

Management of hazardous waste for deployed units is an area of particular concern within ACC. Air Force policy is to be responsible environmental stewards while operating at deployed locations. Units deployed to CONUS facilities coordinate HW management with the host facility prior to deployment. One option to handle generated HW is to manifest the waste and ship it to a storage facility. For overseas deployment the unit prepares an environmental annex to their deployment plans. The specifications of this plan are outlined in JCS publication 4-04, "Joint Doctrine for Civil Engineering Support." At minimum, ACC units have sufficient HW collection materials for the first three weeks of deployment to include a spill kit of sufficient size to handle small releases. HQ USAF/ILEV published a handbook for contingency operations in August 1996 which provides helpful ideas on environmental issues while deployed. The ACC handbook contains a matrix for managers use to determine actions installation agencies might take prior to, upon arrival at, and post deployment to meet environmental minimum essential requirements.

CLEAN AIR ACT: The significant Clean Air Act (CAA) issues impacting ACC bases include final approval of Title V operating permits, complying with Aerospace National Emissions Standards for Hazardous Air Pollutants (NESHAP), and compliance with future NESHAPs. The 5 September 1997 handbook update provides a description of key responsibilities for base level

and Command air quality managers and discusses the Volatile Organic Compound reduction goal for the Command. A summary follows:

Title V operating permit applications for most ACC installations have been submitted to state regulatory agencies. These permits establish specific operating conditions that must be followed by various base organizations. Organizational paint shops, specifically aircraft corrosion control, are potentially impacted by Title V permit operating conditions. Air managers should be familiar with the provisions of their operating permit and establish procedures to maintain full compliance. While the application is waiting approval the installation is operating under a permit shield. Once the state regulatory authority approves the permit the installation must operate in full compliance with the conditions spelled out in the permit. For many of our bases it is essential these permits are issued to establish Federally enforceable emission limits. This becomes critical to achieve compliance with the Aerospace NESHAP rule as proof of status can only be verified through Federally enforceable permits.

The Aerospace NESHAP rule promulgated by the Environmental Protection Agency (EPA) in September 1995 allows aircraft maintenance activities, which are major hazardous air pollutant sources, until 1 September 1998 to achieve compliance. Specific requirements vary with the maintenance activity, but generally the aircraft corrosion control facility will be the most impacted of any operation on the base. ACC bases are striving to achieve minor Hazardous Air Pollutant (HAP) source status by obtaining Federally enforceable permit conditions which limit operations to keep emissions below the major source designation. There is one exception that could apply to many installations which is called the EPA Transition Policy. This policy says if you can prove your actual emissions are 50% or less than the 25 tpy for total HAPs and 10 tpy for any single HAP, you are not a major source. That means if you can prove your actual emissions are below those levels, you don't have to get Federally enforceable limits before you're Title V permit. Per HQ EPA telecon, 28 May 1998, the transition policy is being extended until the potential to emit rule is final. The transition policy will help many ACC bases achieve compliance with the Aerospace NESHAP rule even though their Title V permits have not been issued.

There are a number of upcoming NESHAPs that may impact ACC installations. The EPA is mandated to publish these NESHAPs over the next several years while others have already been published. For example, the woodworking NESHAP restricts emissions from varnishes and lacquers from wood hobby shops. Other NESHAPs to watch include boilers, jet engine testing, and emergency generators.

Each ACC installation is required to prepare a Halon Management Plan plus all facility fire suppression Halon systems must be placed on manual operation. Halon tanks must be leak-tested semi-annually. Halon portable fire extinguishers will be used only in mission critical applications. Effective 1 April 1994, the purchase of Ozone Depleting Substance (ODS) solvents and equipment, systems, and products requiring ODS solvents for maintenance or operation is prohibited without approval.

CLEAN WATER ACT: Updates in the handbook for Clean Water Act (CWA) include the review of responsibilities at HQ and base level, inflow and infiltration assessment progress, a discussion of 40 CFR 503 the sludge rule, stormwater updates, organization car washes, oil water separators for jet engine test cells and deicing management. While no updates were provided on the Safe Drinking Water Act (SDWA) it is appropriate within this paper to review some recent findings of concern relative to water quality.

Inflow and infiltration (I&I) within installation sanitary systems have been found at all ACC bases. Inflow is storm water that rapidly enters sanitary sewers through illicit roof and area drain connections, storm sewer cross-connections, and defects in sewer lines, manholes and manhole covers. Infiltration describes water entering a sewer system from indirect flow of stormwater and groundwater into the sanitary sewer. Examples include leaking joints, misaligned service connections and tree roots. Effective environmental wastewater programs assess the I&I of bases systems to ensure compliance with provisions of the CWA and NPDES permits.

The sludge management regulatory requirement is found in 40 CFR 503, the Federal Standards for the Use or Disposal of Sewage Sludge. This standard "establishes requirements for debris collected in the preliminary treatment phase at a Wastewater Treatment Plant (WWTP) pollutant limits, management practices, and operational standards for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works." Section 503 includes regulations pertaining to sludge quality, method of application, and general and managerial requirements associated with various sludge quality and use/disposal scenarios. Land disposal on ACC bases is at the discretion of the installation commander.

The EPA has chosen the Storm Water Pollution Prevention Plan (SWP3) as their tool for implementing the storm water program. The key components of this plan are: planning and organization, assessment phase, best management practices identification phase, implementation phase, evaluation and monitoring. In order to develop an effective SWP3 thorough assessment for all pollutant sources is required. This includes an inventory of all exposed significant materials, a list of significant spills and leaks, and testing for illicit connections or non-storm water discharges. Illicit connections refer to any source of non-storm water flow which discharges from the base. Three types of permit options exist for industrial storm water permit, individual, general, and the multi-sector general. All ACC bases applied for the Group permit, many have opted out of the group permit and now have individual, or baseline general permits. An effective program includes good housekeeping, preventive maintenance and monthly visual inspections. SWP3 team members conduct annual site evaluations.

The stormwater phase II rules have potential for impacting ACC installations significantly. The CWA Stormwater Rule expands to non-industrial areas. The first phase included industrial areas and ACC bases have prepared SWPPPs with Best Management Practices (BMPs) to comply with the rule. The EPA is now under court order to finalize the Phase II rule by 1 Mar 1999. This rule will regulate military bases along with municipalities less than 100,000 people. This includes stormwater runoff from construction sites one to five acres and may regulate accumulative disturbances of these sites over time. It will also regulate non-point source runoff (e.g. golf courses, construction sites, agricultural areas), will establish total maximum daily loads

or not to exceed contaminant levels, and will require stormwater mapping of areas (e.g. residential and golf courses). Within ACC the use of GIS systems may be appropriate to meet this requirements. Although the deadline is not published yet, environmental managers can expect a deadline 30 months after final rule or about August 2001. Non-structural BMPs will have to be implemented immediately which will include things like, sampling, monitoring, and management actions

Organizational car washes are held to the same stormwater discharge standards as the rest of the base. Effluent from an organizational car wash with the potential to enter the waters of the U.S. needs to be captured and treated or discharged via a NPDES approved discharge point. Operation of car washes should capture and discharge wastewater to a sanitary sewer.

Oil Water Separators (OWS) for jet engine test cells generate a significant quantity of waste Petroleum Oil and Lubricant (POL) products. These waste POL products often find their way into the existing sanitary sewer collection system. It is ACC policy to not construct new OWSs, remove existing systems if possible, or upgrade to more efficient technologies. Use of closed looped washwater reuse systems is acceptable but not always desired because of high O&M costs.

The Air Force Deicing management program organized a tiger team of MAJCOM representatives which developed criteria for prioritizing projects to correct deicing problems. The Air Force Deicing/Anti-Icing Stakeholder's Installation Prioritization Decision Model was developed for this purpose. Implementation of the suggested management practices involves many organizations to ensure run-off reductions and prevent future regulatory actions.

The SDWA amendments signed into law 6 August 1996 substantially change many aspects of the requirements of the Act. ACC has undertaken a comprehensive review of drinking water quality systems to ensure ACC installations identify and correct deficiencies. Compliance investigations to date have found significant problems including cross-connections, back-flow prevention device failure, biological film build-up and ground water under the direct influence of surface waters. Water managers are programming both environmental and facility infrastructure maintenance and repair projects to correct problems.

TOXIC SUBSTANCE AND CONTROL ACT (TSCA): This chapter of the handbook covers asbestos management, PCB issues, lead-based paint and radon. Updates to the asbestos and PCB sections provided with the 5 September 1997 handbook include:

Asbestos enforcement actions continue to plague the Command and often include violations caused by contractors. From 1993 through 1996, ACC averaged one asbestos NOV per year. Appropriate specifications must be written which include minimum qualification and performance standards for compliance with TSCA and the CAA. Many asbestos violations actually are citations from the CAA provisions 40 CFR 61.145, Standard for Demolition and Renovation. The bottom line is the Air Force is responsible for asbestos compliance. The handbook outlines some key areas to watch in contractor removal of asbestos as well as minimum training requirements for personnel. Awareness training should be provided to anyone

who, in the course of their daily activities, might encounter asbestos containing materials. This should include most maintenance personnel and potentially those personnel who prepare vehicles for target use at ACC bombing ranges. Asbestos and operation management plans are also required at all ACC bases.

The Air Force PCB goal established in November 1995 was to be "PCB free" by December 1998. This goal includes removal of transformers and large capacitors contaminated with PCBs. As the Command approaches the December 1998 deadline there are only 20 transformers/capacitors at three ACC bases with PCB items that require action for closure. As a matter of interest, some USTs have been found within ACC which had coal tar protective coatings which contained PCBs. Environmental program managers should test any USTs removed that was manufactured prior to 1982 and has a coal tar exterior protective coat. Other PCB items such as contaminated light ballast not in the Air Force definition should be removed or disposed according to TSCA.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT: There are eight sections of the statute which require action by base environmental managers. The following is a very brief synopsis of the key elements of this law and environmental managers should refer to their state or EPA regulatory agency for local regulatory requirements.

The responsibilities of section 301 include primarily participation with the installation's Local Emergency Planning Commission (LEPC) or State Emergency Response Commission (SERC). This is typically accomplished through cooperative emergency response agreements. Section 302 requires a compilation of all extremely hazardous substances (see 40 CFR 355, appendices A and B) that exceed a specified threshold be notified to the LEPC and SERC. For ACC bases applicable chemicals have typically included chlorine, hydrazine, and toluene. Section 303 requires the LEPC to prepare an emergency response plan for the community. As a local facility, the base is expected to take part in the preparation of this plan along with the annual review. Under certain circumstances releases must be reported to your local LEPC under section 304. Training requirements must meet section 305 minimums for emergency responders.

Sections 311 and 312 outline reporting requirements for extremely hazardous substances and hazardous chemicals. The base supplies Material Safety Data Sheets for any extremely hazardous substance that meets or exceeds 500 pounds or the threshold planning quantity or any OSHA hazardous chemical (29 CFR 1910.1200(c)) that meets or exceeds 10,000 pounds, to the LEPC and the SERC. Section 313 reporting requirements are accomplished on the Toxic Chemical Release Forms(Form R). A Form R is required for listed chemicals manufactured or processed in excess of 25,000 pounds, or used in excess of 10,000 pounds.

SPILL REPORTING: Updates in the spill management chapter of the handbook cover two new areas; chlorine chemicals and aircraft accidents. No changes to spill reporting requirements to the HQ were made. WIMS-ES system is no longer used for spill reporting. ACC bases should primarily use the Air Force operational reporting system through their local wing command post and make reports to HQ ACC/CEVQ and the appropriate regulatory agency.

Chlorine and chlorine precursor chemicals (calcium hypochlorite and sodium hypochlorite) are used primarily as disinfection agents in swimming pools, water treatment plants, wastewater treatment plants, and in households. Chlorine is a poison gas and extremely irritating to the eyes and respiratory tract. Chlorine and chlorine precursor chemicals are listed under EPCRA (40 CFR 355) as extremely hazardous substances. They are also a hazardous substance under CERCLA (40 CFR 302.4) with sodium hypochlorite (Chlorox) having a reportable quantity of 100 pounds, and calcium hypochlorite (bleaching powder) a reportable quantity of 10 pounds. A release of these materials must be managed and reported in compliance with these acts.

ENVIRONMENTAL INCIDENT INVESTIGATION BOARD (EIIB): The purpose of the EIIB program is threefold: investigation, distribution of lessons learned and prevention. Environmental incidents are investigated to determine their causes and identify corrective actions to prevent recurrence of similar incidents. The level of investigation required is determined by the relative seriousness of the incident. There are four categories of investigations: categories 1, 2, 3 and 4. The wing commander ultimately must decide what category of investigation must be pursued and the handbook offers a guide to assist the commander in making this decision. The important change with this update of the handbook was effective 8 May 1997 when the ACC Environmental Leadership Council (ELC) approved EIIB investigations and reporting of petroleum releases up to 1500 gallons are optional at the discretion of the Wing Commander. This limit does not change regulatory reporting requirements of an installation.

ENVIRONMENTAL COMPLIANCE FUNDING: The most important tool for the base environmental manager relative to funding issues are appendices J and K. These outline in detail the eligibility requirements for compliance and pollution prevention funds. The new appendix K, pollution prevention funding matrix, identifies significant HQ USAF/ILEV changes regarding P2 eligibility. The important message is Air Force intent to migrate to a P2 mindset and reduce overall compliance costs. The P2 matrix reflects this strategy and encourages pollution prevention investments in achieving compliance through pollution prevention initiatives. HQ ACC Environmental Programs Division validations for environmental and P2 funds strictly follow the matrixes in the handbook.

The other important addition to this issue of the handbook was the inclusion of Defense Energy Fuels Supply Center (DESC) (formerly DFSC) funding guidance. Funding for environmental projects can be obtained for projects provided the requirement: 1) concerns fuels (JP-8 and some ground fuels) managed by DFSC, 2) involves maintenance and repair work including cathodic protection and secondary containment related to DFSC fuel systems, 3) is required for environmental compliance, or 4) consists of spill cleanup after 1 October 1992 of a DFSC fuel system. Emergency spill cleanup funds can be obtained from DFSC by immediately notifying HQ ACC/CEOI and following up with a spill report and project document, DD Form 1391.

The procedures for obtaining DESC funds are outlined in detail in the handbook. Call letters for DESC projects are sent to ACC installations two years prior to the program year and are typically due in October. Projects are programmed using a DD Form 1391 which is submitted to HQ ACC/CEPD. HQ ACC/CEO submits the project to DESC who authorizes design. The

installation requests design funds from HQ ACC/CEO. Upon design completion the installation requests contracting authorization and upon approval executes the construction project.

CONTRACT SUPPORT: The Environmental Compliance and Analysis (ECAS) contract has been a success for the Command. It has provided easy access to quality environmental services. Recent updates to the handbook review the requirements for delivery order package development and technical project manager responsibilities. If an installation wants a delivery order fast, it can be delivered through ECAS. ACC's ECAS technical project managers can also assist base managers in preparing a Statement Of Work and negotiating the delivery order. There are no fees for these services. Installations may execute a centralized or decentralized delivery order. Installation comments on the success of each delivery order help ensure contracts are responsive to the need of each program manager and help the contractors identify improvement areas.

ENVIRONMENTAL MILCON: Environmental MILCON projects must undergo the same scrutiny of review as other MILCON projects as described in AFI 32-1021 plus they must be Level I environmental non-compliance requirements. Also, the projects must be work classified as "construction." Repair and maintenance projects generally are not supported in the environmental MILCON program. Competition for environmental MILCON dollars is very vigorous. Projects will be viable only if they clearly and consistently document environmental non-compliance with regulatory requirements. Sporadic or occasional non-compliance excursions have not been generally accepted.

PARTNERING: It is the responsibility of Air Force leaders and environmental managers to establish a solid working relationship and rapport with Federal, state and local regulatory agencies. Most regulatory agencies are receptive to establishing positive relationships as they are also charged with establishing partnerships. With current downsizing and dwindling resources, it is imperative that DoD facilities and the regulatory world work smarter together. Partnering is an excellent way to achieve this objective. The keys to establishing effective relationships include:

1) identifying key individuals within each regulatory agencies, 2) maintaining routine personal contacts within each regulatory agency, 3) monitoring contacts with the purpose of keeping a quality contact underscored by trust and sincere friendship, 4) providing a mission briefing to regulatory agencies as needed, and 5) offering assistance when possible. The handbook provides an overview of "how to" methods to achieve a successful partnering arrangement.

POLLUTION PREVENTION PROGRAM: P2 is a proactive and forward thinking management approach to Environmental Compliance. Industry has found that P2 initiatives make good business sense because they reduce the cost of doing business in terms of environmental compliance as well as liabilities. ACC's policy is to prevent pollution at the source whenever possible through source reduction, then through recycling or reuse, and then to use disposal only as a last resort. Each ACC installation is required to have a P2 Management Action Plan (MAP). The P2 MAP is the single reference used to manage the development and execution of an installation's P2 program. The "ACC Prototype Pollution Prevention Plan Version 2," dated January 1995, provides detailed guidance for developing an installation P2 MAP.

Key P2 Goals outlined in the handbook are: 1) hazardous waste reduction to 50% by December 1999, 2) ozone depleting substance reduction of 99% by December 1999, 3) reduction of solid waste by 50% by December 1997, and to 4) recycle 50% of waste by December 1997. Each goal is compared against a 1992 baseline. The solid waste and recycling goals are being reworked by DoD and may be adjusted to a diversion rate goal. ACC is adopting a solid waste goal along the following lines: ACC will, unless required by a local, state or federal mandate ensure the diversion rate for non-hazardous solid waste is greater than 40% by the end of FY 2005 while ensuring integrated non-hazardous solid waste management programs provide an economic benefit when compared with disposal using landfilling and incineration alone. The ACC goal will address regional variances such as climate, markets, demographics, and type of materials recycled.

The handbook also provides guidance in the following key P2 areas: 1) opportunity assessments, 2) technology needs, 3) hazardous waste minimization, 4) toxic release inventory, 5) pesticide management, 6) volatile air emissions, 7) ozone depleting substances, 8) municipal solid waste, 9) affirmative procurement, energy and water conservation and P2 team building. Hazmart implementation to provide cradle to grave tracking of hazardous materials and the move to P2 funding for compliance are key ingredients to a successful P2 Program.

The Civil Engineer organization was directed by AFI 32-7086 to lead the Hazardous Material Management Process (HMMP) team and report to the installation environmental protection committee. In March 1998 the HMMP issued a new hazardous material reduction goal and published it as part of the ACC environmental quality business plan. The Hazmart is part of the HMMP team and the base focal point for the management of Hazardous Materials (HM). It offers a single point of contact for base customers and provides centralized control for HM transactions.

Appendix K summarizes the revised P2 funding eligibility authorized by HQ USAF/ILEV. The push to a P2 mindset and P2 fund growth is supported by P2 investments in environmental compliance. For example, P2 managers should consider initiatives in the following areas: projects to reduce air compliance requirements and emissions like low NOX burners, low volatile organic compounds coating operations, alternative fuel vehicle purchases, projects to achieve and maintaining drinking water compliance and reduce the potential for contamination, and activities that reduce or eliminate environmental permits. These and other opportunities will mean many current requirements can be and should be funded by P2 dollars. The decision to move towards P2 as a method of environmental compliance has been made and will continue to permeate our planning.

SUMMARY: With the draw down of both manpower and dollar resources, installation and HQ level efforts to achieve and maintain environmental compliance will become more challenging. P2 initiatives and funding should become a preferred avenue of choice for all ACC environmental managers to meet compliance needs. While this is a challenging mandate, through creative and innovative thinking it will be possible to continue to deliver high quality environmental programs expected within ACC.

The Environmental Quality Handbook is a consolidated tool for installation managers to understand Command policies and guidance regarding environmental compliance. Although only covered in this paper in an abbreviated form, program managers can see where emphasis should be placed to meet regulatory compliance or Command strategies. Maintaining full compliance with all regulatory programs does not happen by chance. Through the dedicated efforts of many environmental professionals utilizing resources like the Command Environmental Quality Handbook, ACC installations can continue to maintain world class environmental programs.

REFERENCES:

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- 2. ACC Pollution Prevention Manager's Library, 5 Dec 96.
- 3. Environmental Compliance and Analysis Services, Contract Management and Administration Procedures, Jul 97.
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